

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 24.01.2019)

1. ALL INDIA STATUS

Central Water Commission is monitoring live storage status of 91 reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday. Out of these reservoirs, 37 reservoirs have hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of these 91 reservoirs is 161.993 BCM which is about 63% of the live storage capacity of 257.812 BCM which is estimated to have been created in the country. As per reservoir storage bulletin dated **24.01.2019**, live storage available in these reservoirs is **74.229 BCM**, which is **46%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **73.41 BCM** and the average of last 10 years live storage was **79.61 BCM**. Thus, the live storage available in 101 reservoirs **as per 24.01.2019 Bulletin** is **100%** of the live storage of corresponding period of last year and **93%** of storage of average of last ten years.

The overall storage position is **more than the** corresponding period of last year in the country as a whole and but is less **than the** average storage of last ten years during the corresponding period.

2. REGION WISE STORAGE STATUS:

a) NORTHERN REGION

The northern region includes States of Himachal Pradesh, Punjab and Rajasthan. There are 6 reservoirs under CWC monitoring having total live storage capacity of 18.01 BCM. As per Reservoir Storage Bulletin dated **24.01.2019**, the total live storage available in these reservoirs is **10.87 BCM** which is **60%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **44%** and average storage of last ten years during corresponding period was **46%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year and is also better than the average storage of last ten years during the corresponding period.

b) EASTERN REGION

The Eastern region includes States of Jharkhand, Odisha, West Bengal and Tripura. There are 15 reservoirs under CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated **24.01.2019**, the total live storage available in these reservoirs is **11.26 BCM** which is **60%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **67%** and average storage of last ten years during corresponding period was **62%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year and is also less than the average storage of last ten years during the corresponding period.

c) WESTERN REGION

The Western region includes States of Gujarat and Maharashtra. There are 27 reservoirs under CWC monitoring having total live storage capacity of 31.26 BCM. As per Reservoir Storage Bulletin dated **24.01.2019**, the total live storage available in these reservoirs is **10.80 BCM** which is **35%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **47%** and average storage of last ten years during corresponding period was **50%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and is also less than the average storage of last ten years during the corresponding period.

d) CENTRAL REGION

The Central region includes States of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Chhattisgarh. There are 12 reservoirs under CWC monitoring having total live storage capacity of 42.30 BCM. As per Reservoir Storage Bulletin dated **24.01.2019**, the total live storage available in these reservoirs is **21.26 BCM** which is **50 %** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **43%** and average storage of last ten years during corresponding period was **50%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the storage of last year and is equal to the average storage of last ten years during the corresponding period.

e) SOUTHERN REGION

The Southern region includes States of Andhra Pradesh, Telangana, AP&TG (2combined projects in both states), Karnataka, Kerala and Tamil Nadu. There are 31 reservoirs under CWC monitoring having total live storage capacity of 51.59 BCM. As per Reservoir Storage Bulletin dated **24.01.2019**, the total live storage available in these reservoirs is **20.04 BCM** which is **39%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **38%** and average storage of last ten years during corresponding period was **45%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year and is less than the average storage of last ten years during the corresponding period.

The region wise and reservoir wise details are given in the following pages of the Bulletin.

BROAD ANALYSIS OF OTHER TABLES IN THE BULLETIN

- Normal storage means average storage of last ten years, Close to normal storage means where shortfall is upto 20% of normal, deficient storage is where shortfall is more than 20% of the normal and upto 60% of the normal, highly deficient means where shortfall is more than 60% of normal.
- In the table on page 4, better than normal storage is available in Indus, Narmada, Mahi, and West Flowing Rivers of South. Close to Normal in Ganga, Godavari, Mahanadi & Neighbouring East Flowing Rivers and Cauvery & neighbouring EFRs, Deficient in Tapi, Sabarmati and Krishna and Highly Deficient in Rivers of Kutch.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **35** and reservoirs having storage more than average of last ten years are **33**. The numbers of reservoirs having storage less than 20% with respect to last year is **2** and having storage less than 20% with reference to average of last ten years is **2**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **18** and having storage less than or equal to 50% with reference to average of last ten years are **21**.

Disclaimer: The Data contained in this Bulletin is as received from the State Government/Project Authorities.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

AS ON 24.01.2019

- Central Water Commission is monitoring storage status of 91 important reservoirs spread all over the country, in which **37** reservoirs have hydropower benefit each with installed capacity of more than 60 MW. These reservoirs are identified thus(*) in the enclosed weekly report.
- The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on **24.01.2019** is **74.229** BCM (**46** percent of the live storage capacity at FRL).The current year's storage is nearly **101** percent of last year's storage and **93** percent of the average of last ten years.

3 Region wise storage status:-

REGION (Monitoring No. of Reservoirs)	Filling position of 91 reservoirs w.r.t. FRL								Departure from Normal storage	
	100%	91%-99%	81%-90%	71%-80%	61%-70%	51%-60%	41%-50%	40% & below		
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	-	-	-	-	2	3	-	1	H.P. PUNJAB RAJASTHAN	30 % 76 % 14 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.))	-	-	-	4	3	3	2	3	JHARKHAND ODISHA W. BENGAL TRIPURA	-21 % 0 % -26 % 88 %
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	2	5	2	2	16	GUJARAT MAH.	-32 % -29 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	1	4	1	1	5	U.P. UTTARAKHAND M.P. CHHATISGARH	-13 % -4 % 4 % -3 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	2	4	5	1	4	15	AP&TG A,P TG KARNATAKA KERALA T.N.	-46 % -50 % -17 % -2 % 7 % 25 %
Status of 91 reservoirs	0	0	2	11	19	10	9	40		

4 Basin wise storage position:

Better than normal: Indus, Narmada, Mahi, and West Flowing Rivers of South.

Close to normal: Ganga, Godavari, Mahanadi & Neighbouring East Flowing Rivers and Cauvery & neighbouring EFRs.

Deficient: Tapi, Sabarmati and Krishna .

Highly deficient: Rivers of Kutch

- Out of 91 reservoirs, **62** reservoirs reported more than 80% of normal storage & **29** reservoirs reported 80% or below of normal storage. Out of these **29** reservoirs **21** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	0	BARNA	46
VANIVILAS SAGAR	16	GANDHI SAGAR	49
PENCH (TOTALADOH)	21	SOMASILA	50
TILAIYA	29		
SHETRUNJI	35		
NARAYANPUR	35	BHIMA(UJJANI)	44
MANIKDOH	33		
MULA	38		
SRISAILAM	40		
DANTIWADA	44		
MATATILA	43		
UKAI	43		
UPPER WARDHA	44		
SABARMATI(DHAROI)	44		
BHADAR	45		
MAYURAKSHI	47		
JAYAKWADI(PAITHON)	48		

8 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
4	4	0

- Out of **37** reservoirs with significant(*) hydropower generation, the storage build up is less than or equal to normal in

19 reservoirs.

NOTE : **Normal:** Average of previous ten years, **Close to normal:** Where shortfall is up to 20% of the normal, **Deficient:** Where shortfall is more than 20% of the normal and up to 60% of the normal, **Highly deficient** : Where shortfall is more than 60% of the normal

GOVERNMENT OF INDIA

WEEK ENDING :- 24.01.2019

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GOVERNMENT OF INDIA
WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA
CENTRAL WATER COMMISSION

WEEK ENDING :- 24.01.2019											
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
NORTHERN REGION											
<u>HIMACHAL PRADESH</u>											
*1	GOBIND SAGAR(BHAKRA)	512.06	500.99	6.229	4.291	24-01-19	69	53	54	676	1200
*2	PONG DAM	423.67	412.65	6.157	3.508	24-01-19	57	40	43	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	514.82	2.344	1.416	24-01-19	60	23	34	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	275.55	1.711	1.101	24-01-19	64	68	54	63	140
5	JHAKAM	359.50	352.45	0.132	0.072	24-01-19	55	57	45	28	-
*6	RANA PRATAP SAGAR	352.81	347.27	1.436	0.477	24-01-19	33	26	32	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	258.58	0.821	0.363	24-01-19	44	49	46	-	-
8	MAITHON	146.3	142.47	0.471	0.252	24-01-19	54	100	85	342	-
*9	PANCHET HILL	124.97	124.03	0.184	0.140	24-01-19	76	100	85	\$	80
10	KONAR	425.81	422.29	0.176	0.116	24-01-19	66	56	73	\$	-
11	TILAIYA	368.81	364.46	0.142	0.019	24-01-19	13	36	46	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	189.97	5.378	3.556	24-01-19	66	71	72	153	307
*13	BALIMELA	462.08	458.49	2.676	2.036	24-01-19	76	30	49	-	360
14	SALANADI	82.30	73.78	0.558	0.304	23-01-19	54	42	28	42	-
*15	RENGALI	123.50	117.39	3.432	1.534	24-01-19	45	89	69	3	200
*16	MACHKUND(JALPUT)	838.16	835.28	0.893	0.661	24-01-19	74	88	72	-	115
*17	UPPER KOLAB	858.00	854.43	0.935	0.608	24-01-19	65	56	55	89	320
*18	UPPER INDRAVATI	642.00	638.19	1.456	1.057	24-01-19	73	54	63	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	111.19	0.480	0.104	24-01-19	22	94	46	227	-
20	KANGSABATI	134.14	126.26	0.914	0.333	24-01-19	36	74	41	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	90.45	0.312	0.177	23-01-19	57	78	30	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	93.18	6.615	1.704	24-01-19	26	39	60	348	300
23	SABARMATI(DHAROI)	189.59	181.15	0.735	0.137	24-01-19	19	39	42	95	1
*24	KADANA	127.7	123.62	1.472	0.804	24-01-19	55	57	60	200	120
25	SHETRUNJI	55.53	50.27	0.300	0.056	24-01-19	19	46	54	36	-
26	BHADAR	107.89	102.15	0.188	0.030	24-01-19	16	41	36	27	-
27	DAMANAGANGA	79.86	74.00	0.502	0.242	24-01-19	48	79	75	51	1
28	DANTIWADA	184.1	168.37	0.399	0.031	24-01-19	8	59	18	45	-
29	PANAM	127.41	125.60	0.697	0.436	24-01-19	63	62	55	36	2
*30	SARDAR SAROVAR	138.68	120.99	5.760	1.397	24-01-19	24	6	18	2120	1450
31	KARJAN	115.25	109.38	0.523	0.357	24-01-19	68	73	70	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

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							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
MAHARASHTRA											
32	JAYAKWADI(PAITHON)	463.91	457.77	2.171	0.389	24-01-19	18	78	38	227	-
*33	KOYANA	657.90	652.25	2.652	2.089	24-01-19	79	87	75	-	1920
34	BHIMA(UJJANI)	496.83	493.00	1.517	0.426	23-01-19	28	90	64	125	12
35	ISAPUR	441.00	433.83	0.965	0.375	24-01-19	39	7	43	104	-
36	MULA	552.30	540.30	0.609	0.135	24-01-19	22	76	59	139	-
37	YELDARI	461.77	446.73	0.809	0.000	23-01-19	0	5	31	78	-
38	GIRNA	398.07	388.59	0.524	0.155	24-01-19	30	42	32	79	-
39	KHADAKVASLA	582.47	580.52	0.056	0.031	24-01-19	55	73	59	78	8
*40	UPPER VAITARNA	603.50	601.00	0.331	0.250	24-01-19	76	80	76	-	61
41	UPPER TAPI	214.00	212.37	0.255	0.166	24-01-19	65	71	78	45	-
*42	PENCH (TOTALADOH)	490.00	470.00	1.091	0.096	24-01-19	9	17	43	127	160
43	UPPER WARDHA	342.50	336.30	0.564	0.145	24-01-19	26	63	59	70	-
44	BHATSA	142.07	127.60	0.942	0.593	24-01-19	63	73	69	29.378	15
45	DHOM	747.70	738.98	0.331	0.159	24-01-19	48	69	59	36.2	2
46	DUDHGANGA	646.00	638.36	0.664	0.439	24-01-19	66	80	74	2.441	24
47	MANIKDOH (KUKADI)	711.25	691.03	0.288	0.039	21-01-19	14	61	41	2.2	6
48	BHANDARDARA	744.91	730.75	0.304	0.123	24-01-19	40	97	74	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	302.70	0.707	0.143	23-01-19	20	24	47	-	30
*50	RIHAND	268.22	259.51	5.649	2.050	24-01-19	36	39	39	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	348.56	2.196	1.102	24-01-19	50	45	57	1897	198
*52	TEHRI	830.00	802.80	2.615	1.580	24-01-19	60	55	60	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	387.83	6.827	1.361	24-01-19	20	40	40	220	115
54	TAWA	355.40	342.96	1.944	0.474	24-01-19	24	21	46	247	-
*55	BARGI	422.76	417.90	3.180	1.929	24-01-19	61	71	64	157	90
*56	BANSAGAR	341.64	339.04	5.166	4.007	24-01-19	78	57	55	488	425
*57	INDIRA SAGAR	262.13	257.46	9.745	6.087	24-01-19	62	29	47	2380	1000
58	BARNA	348.55	341.75	0.456	0.097	24-01-19	21	24	46	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	353.41	3.046	1.901	24-01-19	62	61	64	-	120
60	MAHANADI	348.70	345.95	0.767	0.529	24-01-19	69	55	71	319	10
SOUTHERN REGION											
A.P & TG											
*61	SRISAILAM	269.75	254.54	8.288	1.465	24-01-19	18	38	45	0	770
*62	NAGARJUNA SAGAR	179.83	163.77	6.841	1.447	24-01-19	21	16	24	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	88.94	1.994	0.615	24-01-19	31	47	62	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	326.38	2.300	0.866	24-01-19	38	45	45	411	27
65	LOWER MANAIR	280.42	274.14	0.621	0.283	24-01-19	46	55	55	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

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							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
<u>KARNATAKA</u>											
66	KRISHNARAJA SAGRA	752.50	748.60	1.163	0.832	24-01-19	72	41	56	79	-
*67	TUNGABHADRA	497.74	487.89	3.276	0.581	23-01-19	18	24	32	529	72
68	GHATAPRABHA	662.95	650.67	1.391	0.629	23-01-19	45	51	38	317	-
69	BHADRA	657.76	654.34	1.785	1.406	23-01-19	79	61	73	106	39
70	LINGANAMAKKI	554.43	548.11	4.294	2.598	24-01-19	61	44	59	-	55
71	NARAYANPUR	492.25	487.30	0.863	0.230	24-01-19	27	58	76	425	-
72	MALAPRABHA(RENUKA)	633.83	624.00	0.972	0.148	23-01-19	15	17	25	215	-
73	KABINI(Sancherla Tank)	696.16	693.66	0.444	0.308	24-01-19	69	60	39	85	-
74	HEMAVATHY	890.63	875.93	0.927	0.171	24-01-19	18	21	22	265	-
75	HARANGI	871.42	856.34	0.220	0.039	24-01-19	18	29	17	53	-
76	SUPA	564.00	551.17	4.120	2.704	24-01-19	66	51	54	-	-
77	VANIVILAS SAGAR	652.28	632.70	0.802	0.023	22-01-19	3	2	18	123	-
*78	ALMATTI	519.60	513.64	3.105	1.125	24-01-19	36	46	40	@	290
*79	GERUSOPPA	55.00	52.72	0.130	0.117	24-01-19	90	85	85	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	113.88	0.507	0.444	24-01-19	88	95	75	62	-
*81	IDAMALAYAR	169.00	153.18	1.018	0.589	24-01-19	58	65	61	33	75
*82	IDUKKI	732.43	724.13	1.460	1.016	24-01-19	70	62	57	-	780
*83	KAKKI	981.46	970.78	0.447	0.288	24-01-19	64	83	72	23	300
*84	PERIYAR	867.41	861.54	0.173	0.050	24-01-19	29	25	32	84	140
85	MALAPMUZHA	115.06	106.63	0.224	0.072	24-01-19	32	29	37	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	275.16	0.792	0.571	24-01-19	72	26	39	105	8
*87	METTUR(STANLEY)	240.79	226.08	2.647	0.968	24-01-19	37	17	36	122	360
88	VAIGAI	279.20	274.04	0.172	0.073	24-01-19	42	17	33	61	6
89	PARAMBIKULAM	556.26	552.14	0.380	0.295	24-01-19	78	24	56	101	-
90	ALIYAR	320.04	307.82	0.095	0.026	24-01-19	27	4	48	#	60
*91	SHOLAYAR	1002.79	987.33	0.143	0.061	24-01-19	43	0	15	-	95
TOTAL FOR 91 RESERVOIRS				161.993	74.229						
PERCENTAGE							46	45	49		

Sd/-
Director
W. M. , CWC

* HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW
\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM
TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR
@' TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI
† SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.